Improved access within the study area would help improve the potential to attract long-term residential and business growth.

Construction activities would create short-term air quality impacts, such as dust due to earthwork, road improvements, and exhaust from construction vehicles. Short-term noise impacts would be unavoidable due to use of heavy equipment. Air and noise abatement measures would be incorporated to minimize these short-term impacts during construction.

Short-term and long-term visual impacts would occur in the vicinity of the construction corridor. NCDOT mitigation measures, such as reducing slope cuts outside necessary road widths, reducing vegetation removal, leaving in place native vegetation screens, and minimizing alteration of scenic ridge lines and slopes would be used to reduce long-term visual impacts.

Implementation of the NCDOT *Best Management Practices for Protection of Surface Waters*, as described in Section A.4.5.3, would minimize potential water quality impacts. In addition, the NCDOT will continue to consult with the appropriate Federal and State environmental resource and regulatory agencies to identify measures to minimize these impacts.

A short-term impact of construction would be the removal of biotic communities and wildlife within the proposed right-of-way and construction staging areas. Notably, a spring-flowering goldenrod community covers 1.21 acres of roadside ditch environment in Alternative 3. Recovery rates of local wildlife populations are expected to be relatively fast and no effect on long-term productivity is expected.

The local, short-term impacts and use of resources by the proposed action would be consistent with the maintenance and enhancement of long-term productivity. Construction of the proposed improvements would improve a vital link to the long-range transportation system for the region. The project is consistent with the long-range transportation goals and objectives of the NCDOT *Transportation Improvement Program* and guidance provided by other regional planning bodies. It is anticipated that the roadway would enhance long-term access opportunities in Jones and Onslow Counties and would support local and regional commitments to transportation improvement and economic viability. Benefits of the proposed project would include decreased congestion on existing US 17, improved roadway safety on existing US 17, improved regional connectivity between Jacksonville and New Bern, and improved high speed regional travel along the US 17 intrastate and STRAHNET corridor.

4.2 INDIRECT AND CUMULATIVE EFFECTS

s part of the project planning process, the potential indirect and cumulative effects of the proposed project were evaluated. This included looking at the effects from the proposed